

ABSTRACT OF THE DISCLOSURE

Disclosed are an apparatus and a method for adaptively detecting received signals for power line communication, which are capable of stably receiving desired data transmitted via a power line irrespective of variations in channel characteristics. The apparatus includes a main control unit (MCU) interface unit for adjusting a timing of data transmission, a register unit for storing control data, a threshold value, an offset value, and an error rate received from the MCU interface unit, and for outputting the stored data and values, a control logic unit for controlling a selection of a threshold value, based on the control data stored in the register unit, a reference data selecting unit for selectively outputting, as threshold values, the threshold value and offset value respectively stored in the register unit or an external threshold value and an external offset value, under control of the control logic unit, and a data processing unit for determining, based on threshold values to be selectively outputted by the reference data selecting unit, whether or not the serial data received via a power line is effective data, and for outputting the data.